

**Abstract**

In accordance with the present invention there is provided methods for generating an isotropic or near-isotropic three-dimensional images from two-dimensional images. In accordance with the present invention the method includes, obtaining a first image of a body part in a first plane, wherein the first image generates a first image data volume; obtaining a second image of the body part in a second plane, wherein the second image generates a second image data volume; and combining the first and second image data volumes to form a resultant image data volume, wherein the resultant image data volume is isotropic or near-isotropic.